# **Decentral Autonomous Bank**

One world – one bank – from people to people

By Decentral Autonomous Bank Foundation (in registration, Canton Zug, Switzerland)

Date: 31<sup>st</sup> of August 2017

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# 1 Vision

### 1.1 Imagine a World

Imagine a world, where citiziens of **capital exporting** countries can easily offer their surplus capital to people who need capital.

Imagine a world, where citiziens of **capital importing** countries can more easier than now access capital for building their dreams.

Imagine a world, where **financial products** are offered **peer to peer (P2P)** from one world citizien to another world citizien without intermediaries, without high transaction and/or service fees and in timeless manner.

This is the **vision** of the **Decentral Autonomous Bank** – the bank from the people to the people, without intermediaries.

#### 1.2 Decentral Autonomous Bank

Decentral Autonomous Bank will work as **Digital Autonomous Organisation**, it will not have any central components - all his functionality will be deployed decentrally in blockchains.

Decentral Autonomous Bank will create **P2P Marketplace** for financial products, a marletplace without intermediaries. It will act as "matching engine" between the Supply and Demand on the market.

It is not the goal of the Bank to compete with traditional banking model, but rather to position himself as complementary to the traditional banking model – it's **best of breed** approach for the clients, who will on the end decide which services they will source from where.

Decentral Autonomous Bank never owns the private keys of Clients – the **private keys stay always with the Clients**. Most cryptocurrency exchanges and all traditional financial services are trading IOU's of respective assets and not the assets themselves

Decentral Autonomous Bank has **low service fees** on P<sub>2</sub>P financial products and distributes all these service fees back to the stakeholders. Low service fees are possible because for being Digitial Autonomous Organisation – an organization without any workforce.

Decentral Autonomous Bank's vision is to **continuously add P2P financial products** to make them available in P2P mode to every world citizien. Decentral Bank anticipates ICO 1, ICO 2, ICO 3 and following ICO's for continuously creating value to their clients.

Decentral Autonomous Bank builds up on the idea of Decentral Exchanges, where clients can exchange their assets without being exposed to centralized exchange risks. Well known risk events like Mt. Gox in cryptocurrency ecosystem or Lehman Brothers in traditional banking have created central counterparty risk awareness, but so far there are only very limited alternative offerings available.

Decentral Autonomous Bank clients will have **reduced risk exposure**, because they are not exposed to counterparty risk of central financial services providers, but only to credit risk of their contract parties,

# 1.3 Decentral Future

We believe into **decentral structures** as opposed to central structures. Central structures have limited timespan; decentral structures will learn, adjust and offer much more to their participants as central structures can do this.

**Internet** was created as **decentral structure**, however it has developed into highly centralized network. We hope that decentral blockchain based monetization approaches, including Decentral Autonomous Bank, **allows Internet** to develop towards his **initial decentralization goals** again.

# 2 Target Market

### 2.1 Market Analysis

Traditional highly **regulated banks** are facing high operating costs on one hand and have limited offering to global clients on other hand.

Regardless of these limitations they succeed to generate in current economical environment high net interest income (als known as lending income), which translates into bad financing deals to their clients (the lenders earn to little and the lendees pay too much).

By looking on **global economy** we recognize:

- Economies, which are in **demand of capital** usually countries with growing population, with high working population ratio. They have naturally higher demand for capital, which result in higher interest rate in capital importing countries
- Economies, which have excess of capital usually counties with not growing or decreasing population, with rather lowering working population ratio. As there is oversupply of capital in respective countries, then this results in very low or even negative interest rate in capital exporting countries

However, there is no effective frictionless marketplace between these economies.

The **clients** are demanding for:

- Reasonable interest rate for their assets on one side (interest rates on the accounts are zero or even below the zero in some jurisdictions)
- Reasonable loan interest rates on other side (accessibility to lending facility is limited in global economy)

However, these goals are difficult to achieve considering the low-efficiency of traditional banks, current zero intererest policy environment and high profits of traditional banks.

This situation, where:

- Traditional banks are generating high net income interest without offering better conditions to their
- No effective marketplace between capital exporting and capital importing economies
- Not satisfied client demand for reasonable lending rates

translates into **emergence of alternative financing channels** through P<sub>2</sub>P lending facilities, which are "cutting the middleman" in the financing process.

**P2P lending facilities** are growing on 52% CAGR Rate, the market is expected to reach 460 Billion USD market in 2022. These lending facilities are nearly 100% for traditional fiat based monetary transactions.

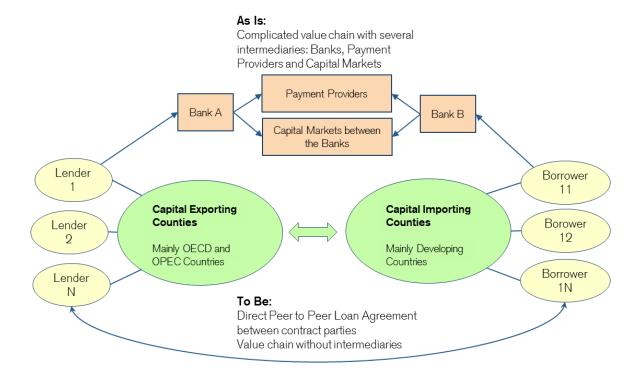
Let's summarize the trends on the market:

- The growing demad for alternative P2P lending facitilies
- Increasing adaption rate of crypto currencies

And one can recognize the growing demand for P2P lending facilities for crypto currencies which would address shortcomings of existing solution.

This results in the market positioning of Decentral Autonomous Bank:

- Instead of using As Is complicated value chain with several intermediaries
- Clients will have the opportunitiy for direct Peer To Peer Loan Agreements



# 2.2 Value Proposition

Value proposition of Decentral Autonomous Bank is:

- Global Decentralized marketplace for peer to peer financial products
- No intermediaries
- No central counterparty risk
- Globally decentrally running software
- Clients control his assets and respective private keys
- Access to global capital demand to Loan Offerers
- Access to global capital supply to Loan Requestors
- Low transaction fees to marketplace participants

# 3 Product Strategy

Decentral Bank follows extendable P2P financial products strategy.

The aim is to:

- Continuously develop and launch new P2P financial product offerings, starting from simpler products and moving towards more complex products
- Create the P2P marketplace for the respecitive P2P financial products
- Use Product specific transaction fees, which will be distributed between the miners in delegated proof of stake mode (see more in Chapter "Incentivization Model")

Product selection is driven by:

- High number of expected transactions
- Simple peer to peer product designs
- Clients are always in control of the the private keys of their assets

Collateralized P2P Lending products have high volume and they would be rather simple to implement. Therefore they would be in scope.

Trade financing solutions have much lower expected transaction volume and would be complex to implement (as these are flows between multiple process participants). Therefore they would not be in the scope.

This analogy here would be used for every product candidate. Several of specific financial products are therefore not in the scope; however, the product candidates list would more than cover the standard financing needs.

### 3.1 Products

Implementation and launch of products is aimed in the following order:

- Starting with Simple P2P Lending products this will be autonomous P2P marketplace between loan offeres and loan requestor
- Adding P2P Swap products this will be autonomous P2P marketplace for complexer lending products
- Adding automated asset management products client benefit from automated asset management products for his assets

### 3.1.1 Collateralized P2P Lending

This product is part of ICO 1.

It is based on P2P lending agains a collateral. Collaterals are used for reducing the lending risk. The process would be following:

Loan Requestor will submit Loan Request consisting of:

- The amount and type of crypto coins he would like to receive
- Duration of the loan
- Interest he is willing to pay to the P2P Loan Offerer

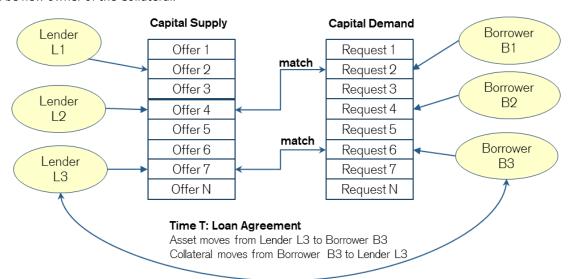
Loan Requestor has to submit Collateral to his Loan Requests too, which will be in 1:2 multisig for Loan Requestor and Platform – if Loan Requestor whishes to cancel the Request, then he can easily do so. Or if Platform can match the Loan Request, then Platform can execute Loan Agreement process.

Loan Offerer will submit Loan Offer consisting of:

- The amount and type of crypto coins he would like to offer
- Duration of the loan
- Minimum interest
- Minimum expected Credit Risk Rating

If Loan Request and Loan Offer match in the Lending Book then P2P Loan Agreement is created and assets are transferred in exchange of Collateral between participants.

If Loan Requestor pays back the Loan, then the collateral is released to Requestor. Otherwise the Loan Offerer will be new owner of the Collateral.



Time T + Loan Duration: Loan Expiration

Principal and interest move from Borrower B3 to Lender L3 Collateral moves from Lender L3 to Borrower B3

# 3.1.2 TRUST tokens based P2P Lending

This product is part of ICO 1.

Every client will build up his history on the platform. If client is paying back his loans regulary, then his trust will increase and his credit risk rating will improve. If client will not pay back his loan, then he will loose his trust on the platform and will receive the lowest credit risk rating.

Trust will be modelled with TRUST tokens, which are ERC 20 based tokens. TRUST tokens are mined by the loan repayments -1 TRUST token for 1 BTC payback (respective conversion rates apply for other crypto currencies). Trust tokens are not assignable, they stay with the address where they where created. If loan defaults, then all TRUST tokens of the respective address will be burned.

TRUST tokens improve client Credit Risk Rating, but this rating will never reach the level of "no risk" (otherwise one can develop possibilities for playing the system). Therefore there will be always a requirement to secure loan with a collateral.

### 3.1.3 Crowd based P2P Lending

This product is part of ICO 1.

Lender has possibility to specify, which ratio of the loan request he is ready to allocate – for example 5% of the loan request. Credit risk of Loan Requesters will be divided so between different loan offerers.

### 3.1.4 Automated P2P Lending

This product is part of ICO 1.

The lenders can choose to lend their assets in automated way. Lender will specify the risk level, which he accepts and the duration. For example lender can lend for 1 month, for medium credit risk and on annual interest of 15%.

Decentral Autonomous Bank will match offers in automated way, without a need for lenders to do anything.

# 3.1.5 General P2P Swaps

General P2P Swaps are in the scope of ICO 2, however will be described here as outlook.

Every complex loan can me modelled as a swap between the contract participants. Collateral based products are simple swaps – there is one payment in and one payment out.

However, there can be more than one "payment in" and more than one "payment out". The "underlying in" and "underlying out" can be from different types too.

For example mortgage can be evaluated as a swap: there is one "payment in" and multiple "payment outs" every month.

For example forward can be evaluated as a swap: there are two "payment in's" and two "payment out's" into two underlyings.

General P<sub>2</sub>P Swaps would allow to cover range of diverse financial products. The key Product Strategy principle will be used – if expected number of P<sub>2</sub>P transactions is high, then respective P<sub>2</sub>P Swaps will be integrated and vice versa.

These products will build up on Collaterialized lending models and on Client Credit Rating models.

### 3.1.6 Automated Investments management

Automated Investment management products will be in scope of ICO 3.

The key idea of Decentral Bank is to enable financial P2P products. However, in case of investment management we do not have the second party. We have only a client and we have automated investment management of Clients Assets by Decentral Bank.

Client would assign his assets with 1:2 multisig to Decentral Bank platform. Decentral Bank would execute automated investment management based on Clients Investment Policy Stement.

Client will be owner of his assets – because of 1:2 multisig he can easily transfer assets, if he would like so. Decentral Bank will have access to client assets through 1:2 multisig and can perform automated portfolio management operations as defined by automated algorithms.

Client investment profile would be defined based on standard questionnaire, which results in:

- Ability to take a risk It's driven by investors perceptions of his wealth relative to the needs, by investments time horizon, by critical goals and by ability to whitstand losses.
- Willigness to take a risk it's driven by the source of wealth entrepreneurial or active wealth creation results in higher willingness to take a risk; salary based income or retirement would result in lower willingness to take a risk.

Different combinations of Ability and Willgness will result in different Investment Pprofiles, which will result in different Investment Strategies.

This approach is described in **Founders Blog**.

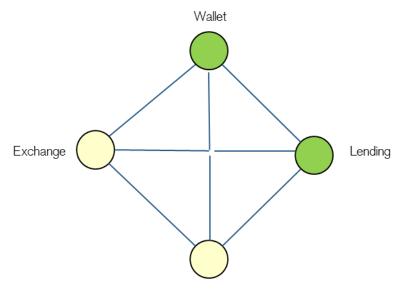
### 3.1.7 Cooperation model based products

Decentral Autonomous Banks products are positioned in the area where intense finance know-how is required.

In the same time, there are several additional products, which would add value to our clients and would enrich client experience. These products will be offered through cooperation models with other providers.

The long term target model is described on the following figure. "Green" items are in the delivery scope of Decentral Autonomous Bank. "Yellow" items would be integrated in the cooperation models:

- Integration of Decentral Exchanges
- Integration of Payment Gateways



Payment Gateways

If all these four products are ready (or integrated), then we have solutions which would cover traditional banking "retail segment" – banking for everyday needs for 95% of traditional banking clients.

This would result in **fully functional cryptobank**.

# 3.2 Underlyings

Decentral Bank:

- will start with ERC20 based tokens as loan and collateral
- will add then Bitcoin as loan and collateral
- will continuously add other shortlisted crypto currencies as loan and collateral
- will add Fiat currency proxy coins

We expect as well fast tokenization of real assets, which would significantly increase potential collateral base.

# 3.2.1 ERC 20 based tokens

Ethereum based tokens are easiest to implement because of smart tokens functionality, which will be used for smart contract between Loen Requestor and Loan Offerer.

Loan Offerer submits his Loan Offer, inclusinve parameters like risk level, collateral, loan duration, etc. Loan Requester submits his Loan Request, inkl. Collateral, time duration, etc.

In case of P2P Loan Agreement between Loan Requestor and Loan Offerer following will happen:

- Funds will move from Offerer to Requestor
- Collateral will move from Requestor to Offerer
- Smart contract will be initiated, which bounds the collateral for Loan Duration
- Platform will receive service fee

P<sub>2</sub>P loan agreement will end either by

- Release of collateral to the Loan Requestor by timely payment of principal and interest or
- Transfer of collateral to Loan Offerer in case of the default

## 3.2.2 Bitcoin

As Bitcoin does not have smart contracts functionality, then the 1:2 multisig functionality will be used for submitting loan offers or loan requests. Clients will be so in control of his assets and Decentral Autonomous Bank can execute Loan Agreements if Loan Requests and Loan Offers match.

In case of P2P Loan Agreement between Loan Requestor and Loan Offerer following will happen:

- Funds will move from Offerer to Requestor
- Collateral will move from Requestor to Offerer as 2:2 multisig transaction for the Loan Offerer and Platform
- Platform will receive service fee

In case of P2P Loan Repayment following will happen:

- Principal and Interest will move from Requestor to Offerer
- Collateteral will move from Offerer to Requestor as 2:2 multisig transaction for Loan Offerer and Platform
- Requestor will receive non-transferrable TRUST tokens, which will improve his Credit Risk Rating

In case of P2P Loan Default following will happen:

- Collateral will stay on Offerer's account
- Platform will confirm with his signature Offerers ownership of Collateral
- All TRUST tokens associated with Requestors account will be deleted. Requestors credit rating will sink to the lowest possible level.

# 3.2.3 Additional crypto currencies

Additional top crypto currencies will be added one after the other. The requirements for inclusion are:

- Support of multi-signature functionality
- Significant trading volume on biggest cryptocurrency exchanges

Following crypto currencies are shortlisted at the moment:

- NEM
- Dash
- LiteCoin
- Ethereum Classics
- Waves
- Bitshares

#### NEO

General loan processing approach is following:

- If loan is done in Bitcoin and collateral is Ethereum based then multisig approach has to be used in the processing.
- If loan and collateral are Ethereum based, then Ethereum Smart Contracts will be used
- Otherwise multi-signature approach will be used

We anticipate, that big parts of loans will not be Ethereum based – this from simple reason that ETH and ETH based cyprocurrencies are less than 1/3 of total market cap.

## 3.2.4 Integration of Fiat Proxy Crypto Currencies

Decentral Autonomous Bank will not support directly fiat curreny currencies, however it will support fiat proxy's:

- Tether based fiat proxy's like USDT, EURT and JPYT
- Bitshares based fiat proxy's like bitUSD, bitEUR and bitCHF
- As crypto currencies are becoming more and more common, then emerging of additional fiat proxy
  cryptos is expected. The aim is to add them to the platform after they have reached reasonable daily
  volume

An example of using fiat proxy crypto currencies would be following - client is taking USD based loan against Bitcoin:

- 1. Take a USDT loan / submit Bitcoin as collateral
- 2. Convert USDT into USD
- 3. Convert USD into USDT
- 4. Pay back loan / receive back Bitcoin collateral

# 3.2.5 Tokenization of Real Assets

There are many discussions / approaches for tokenization of real assets (real estate, precious metals, etc). We are confident that these approaches continue development, which would enable even higher collateral basis borrowers.

# 4 Incentivation Model

Product strategy follows extendable product strategy. Each of added products will generate transaction fees (service fees) per executed P<sub>2</sub>P contract.

Decentral Autonomous Bank transaction fees are product specific:

- Lending (delivered with ICO 1): 0.2% of a Loan Contract
- General P2P Swaps (delivered with ICO 2): 0.2% of a Loan Contract
- Automated Investment Management (delivered with ICO 3): 0.1% of Assets under Management on top of respective Exchange fees.

#### The fee structure is:

- Transparent
- No hidden fees
- Highly competitive in comparison to traditional banking fee structures

Borrowers can pay fees with:

- DAB Coin or
- With any cryptocurrency supported on the platform. The idea is to incentivice the usage of DAB Coin as mean for fee payment. However, if client chooses some other currency, then a markup factor of 25% will be used on top of exchange rate of respective crypto currency

**Lenders** benefit from tapping global capital demand and good interest rates.

**Borrowers** by enefir from tapping global capital supply and good interest rates.

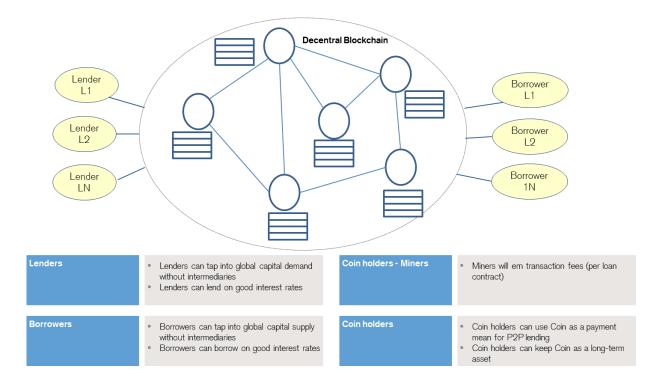
Decentral Autonomous Bank will build up his own Blockchain with delegated proof of stake protocol.

**Miners** will earn all transaction fees from Loan Agreements. The allocation will be either in DAB Coin or in other crypto currencies (but then with markup).

**Non-miner** token holders will not receive any transaction fees. However, they can use the DAB Coin as mean of payment on the platform and as investments.

In the initial phases of the product launch we might have low number of miners. Decentral Autonomous Bank Foundation will facilitate availability of required mining capacity. As the mining community will develop then Decentral Autonmous Bank will step back from any mining activity.

Decentral Autonomous Bank Foundation will not receive any transaction fees from the platform – all his development and marketing investments will be covered by funds received from ICO's.



# 5 Credit Risk Model

Lending is always connected with default risk. Therefore Decentral Bank calculates Credit Risk Rating for every Client. Driving paramets for this model are

- Clients transaction history transaction history is transparent in diverse blockchain and will be analysed with dedicated algorithms
- Additionally submitted ID information for example uport.me and other emerging blockchain based indentity solutions
- Additionally submitted Facebook, LinkedIn, E-Bay information
- Lending history on the Platform TRUST tokens

We follow full open source approach. Although Credit Risk Models will be proprietrary know-how, they will be open source as well.

# 5.1 Automated Credit Risk Rating

Clients Credit Risk Rating visualizes risk of lending, it is rated on the scale from 1 (highest risk) to 10 (lowest risk). It visualizes clients ability to pay back the loan.

Following parameters influence Client Credit Risk Rating:

- Client transactions history on diverse blockchains if it shows stable asset inflow, then the risk rating
  is lower
- If Client is new to the platform and does not have any TRUST tokens, then the rating is higher. By using the platform and lending assets he will build up his TRUST tokens, which results in lower risk rating
- If Client submits his uport ID, this this results in lower risk rating
- If Client submits his Facebook, Linked In and our E-Bay accounts, then this information will be evaluated, and will probably result in lower risk rating
- Client can act anonymously on the platform, this will however result in lower Credit Risk Rating. Client could compensate parts of this higher risk rating with TRUST tokens from his lending history, however lowest risk rating will be available only by exposing parts of personal information.

It is expected that different Credit Risk levels will have different interest level – lower Credit Risk Rating will result in lower interest levels and vice versa. Decentral Bank will not set interest levels for different Credit Risk Ratings, but the interest rates for risk levels will develop on the loan supply  $\Leftrightarrow$  loan demand market.

Initial risk models will be rules based. The aim however, is to replace rules based risk models with Artificial Intelligence / Deep Learning based risk models, which would become self-learning models.

# 5.2 TRUST tokens

TRUST tokens are ERC20 based tokens, which are mined by payback of a loan. If one ETH is paid back, then one non-transferrable TRUST token is assigned to respective ERC20 address.

TRUST tokens are included into Credit Risk calculation. More TRUST tokens improves Clients Credit Risk rating and vice versa.

# 5.3 No Central Counterparty Risk

95% of crypto trading is running over central exchanges where clients are actually trading in IOU's and not in the real crypto assets (real crypto assets are with the exchange and clients are using IOU's, which represent

these assets). Only 5% of crypto trading is running over decentral exchanges, where clients always control their private keys.

As Decentral Bank never keeps Clients private keys, then there is as well no central counterparty risk. The only risk for the clients, is the Credit Risk of their P2P counterparty, which will be mitigated with automated Credit Risk Rating and with our recommendation not to invest more than 5% of assets into one loan.

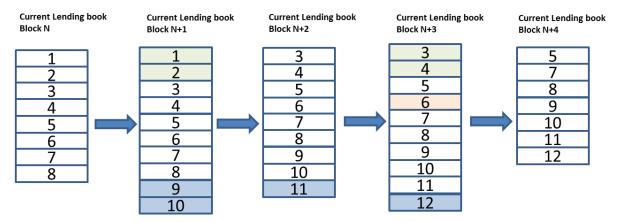
# 6 Architecture

#### 6.1 Decentral Solution

Decentral Bank will implement an highly scalable completely decentral architecture by utilizing and combining several decentral technologies. There will be no central components, everything will be deployed completely decentrally.

Many DAO's (Digitial Autonmous Organisations) are trying to keep all their information in the Ethreum blockchain. This is nice idea, however it does not scale, if one needs either more data or if one needs to do many calculations. This type of on-chain processing would probably result in slow processing time or in high transaction costs (or in both) and does not fit our Architecture.

Decentral Bank is supporting diverse Blockchains - collaterals and assets can be from different Blockchains, We cannot use only on-chain processing because of need for scalable architecture and cross chain transactions. Therefore the means of off-chain processing will implemented, however in completely decentralized way.



#### Nodes

· Current Order book is in blockchain

#### Data

- · Block is created every 3 seconds
- Matched or cancelled order are removed
- Chain doesn't contain full history, but older blocks contain hashes (respective order history will be stored in IPFS)

### Transaction Execution

· Transactions Execution are split between the worker nodes

#### Mining

- $\,$  Z from N nodes are selected, they perform the mining calculation
- Y nodes from Z nodes are chosen as Transaction Execution processors

All Decentral Bank components will be deployed decentrally:

- Client Wallets clients always control their private keys, they will be always in control of their assets in respective Blockchains (excepts if some of the assets are used as collateral in this case platform would have escrow on them)
- Lending Book and Matching Engine will be deployed in blockchain
- Transaction Execution and Signing will be deployed in special worker instances in blockchain. These worker instances contain as well ethereum, bitcoin and other required nodes
- Credit Risk Calculation Engine will be deployed in special worker instances in blockchain

- Client Risk Profile will be deployed on IPFS platform and is encrypted by design
- Historic Order Data will be stored on IPFS platform and is encrypted by desgn

Decentral Bank will build up his owen blockchain, which will be fork of Bitshares. Special worker nodes will be used for background Credit Risk Calculations. A dedicated coin – DAB Coin – will be used for miners and workers incentivation.

# 6.2 Use Cases

Key Use Cases:

# 7 Competition

The analysis of our competition is described in the following. Obviously, we tried to come up with a solution, where we address the weaknesses of our Competion and build up on the strengths of our solution.

However, as P<sub>2</sub>P finance is developing market, then we are more than happy to have competition:

- This gives to all of us the opportunity to educate the market together and
- This gives to the clients the opportunity to choose the best products for them

### 7.1 ETHLend

We think ETHLend idea is excellent. However we notice following gaps to our model:

- ETHLend is only Ethereum ERC20 based architecture, other crypto currencies are not supported by design
- ETHLend collateralized lendning is good idea, but we don't see Extensible Product Model
- As ETHLend is Ethereum based DApp, then we express our doubt in the scalability of this solution if lending book will start to grow. Low scalability might impact the Revenue model
- We afraid, clients will face high transaction costs in executing ETHLend smart contracts because everything is executed on Ethereum blockchain resulting in high gas costs

# 7.2 ETHFinex

Bitfinex announced lately spin off of ETHFInex for creating decentralized exchange and lending for ERC20 Ethereum tokens. We like this idea very much and we notice following:

- We hope on complementary cooperation with this platform in the future
- We like the idea of using Distributed Hashtables for Orderbook processing outside of Ethereum blockchain and of dedicated workers for trade execution

## 7.3 Veritaseum

The company behind Veritaseum positions themselves as software service provider, where market participants will deal with each other directly in P2P manner. We like the P2P idea, however we notice following gaps to our model:

- It is not fully clear is this a centrally hosted or decentrally (in which blockchain?)
- It is not clear how the Revenues of Veritaseum products are distributed to the token holders
- It is not clear how the Credit Risk Management and Collateral Management are handled

Market cap of of available Coin Supply is ca 300 mUSD. As this represents 2% of total supply, then we are getting total market cap of ca 15 Billion USD.

### 7.4 Lykke

Lykke is Swiss based company offering "semi-decentralized" exchange – clients are controlling their private keys, however order matching is done with centrally hosted components. "Semi-decentralised" exchanges are a step into right direction. However, we notice following gaps in Lykke's model:

• Lykke is using colored coins, which can be traded only on their own exchange. These coins can be kept only in Lykke wallet and in Coinprism wallet at the moment

- It is kind of closed architecture and not fully open architecture for blockchain trustless concepts
- Lykke coins will be traded on Lykke exchange only, which is obviously controlled from Lykke, which might raise a question of porentially possible conflict of interest

Market cap of available supply is ca 50 mUSD. As available supply is ca 20% of the company then we are getting to total market cap of ca 350 mUSD.

# 7.5 Polybious

Polybius is building a traditionally regulated bank, however with the aim to achieve full digitalization. Polybius plans to apply for a full banking licence in the near term.

Polybious will benefit from European Payment Services Directives – PSD 1 & PSD 2 – which require European Banks to open up their payment services layers to other financial service providers (like Polybious)

We like digitalization idea, however we notice following:

- Polybious is not really a crypto-economy participant, but is aiming to build up a fully regulated digital bank by using crypto technologies
- The Digitalpass Technology is quite interesting approach

Market cap of available supply of Polybius is currently ca 20 mUSD. Ploybius tokens are entitled to 20% of distributable profit of Plybious Bank, ie they represent 20% of Plybius, which brings us to total market cap if 100 mUSD.

### 7.6 Salt

Salt would offer fiat based loans against crypto assets. The idea is good, however it's not fully clear how it would be working.

In our hopefully best understanding we interpret following:

- Salt platform will probably own clients asserts in some steps of lending process, which translates into central counterparty risk
- As Salt platform owns clients assets in parts of lending process, then it will be subject to client domicile specific financial regulations

# 7.7 Traditional P2P lending markets

Traditional P2P lending markets are built on central systems and they own clients assets in partic of lending process. The approach of Decentral Bank is different:

- There are no central components, but decentral components only
- Decentral Bank never owns client assets, which translates into missing central counterparty risk

# 8 Roadmap

Decentral Bank is not one time initiative, but follows multi-phase multi-year Roadmap.

### 8.1 PreSales

PreSales will be used for:

- Specifications
- Prototyping
- ICO preparation
- Finalizig set up of Decentral Bank Foundation in Zug, Switzerland

#### Presales:

- Is expected to start in the second week of October and will last for 6 weeks
- Target is 0.5 1.0 mUSD

### 8.2 ICO for the Phase 1

Phase 1 Key Deliverables are:

- Decentral Bank Wallet, inclusive Credit Risk Rating Calculation
- Launch of Decentral Bank Blockchain
- Collateralized lending for ERC20 based tokens and Bitcoin
- Automated lending

# ICO 1:

- Is expected to start 2<sup>nd</sup> week of January and will last for 6 weeks
- Target is 10 mUSD
- Aims to have rather large number of small investors as opposed to small number of large investors

Allocation of DAB Coins from ICO 1 is following:

- Development: 50%
- Legal: 10%
- Administration: 10%
- Bounties for Marketing: 30%

# 8.3 ICO for the Phase 2

Phase 2 Key Deliverables are general P2P Swaps and it will be financed with ICO 2.

# 8.4 ICO for the Phase 3

Phase 3 Key Deliverables are automated investment management products and it will be financed with ICO 3.

# 8.5 ICO's for Additional Phases

 $Additional\ ICO's\ will\ be\ organized\ for\ further\ P_2P\ financial\ products\ for\ extending\ P_2P\ product\ portfolio.$ 

# 9 Structure

# 9.1 Decentral Autonomous Bank Foundation

Swiss based Decentral Bank Foundation (registration process started in Canton Zug, Swtzerland) is a Sofware Provider, who:

- Is non-profit organization
- Will continuously develop and market products for Decentral Bank
- Will organize ICO's for the RoadMap execution
- Will be financed only with ICO's of the DAB Coin. No other financing means will be ever used
- Will not receive any transaction fees from the DAB Coin the fees belong to the DAB Coin miners
- Will support other decentral P2P projects with know-how and technology
- Will evangelize the age of decentral P2P solutions

## 9.2 DAB Coin

DAB Coin will be TO BE DEFINED based token. 100 million DAB Coins will be created once and will be offered in multi-phase approach.

All transaction fees of Decentral Autonomous Bank (less the transaction fees on asset blockchains) are distributed to the miners of DAB Coin Network in proof of stake mode.

Non-miners can use the DAB Coins as mean of payment on the platform and as an long-term asset.

Allocation of DAB Coins:

- 5% of DAB Coins will be offered in the Pre-Sales
- 20% of DAB Coins will be offered in ICO 1
- 10% of DAB Coins will be offered in ICO 2
- 10% of DAB Coins will be offered in ICO 3
- 20% of DAB Coins will be allocated to the **Founders** of Decentral Autonomous Bank Foundation.
  - o 50% of them will be locked in for 24 months
  - o the other 50% will be locked in for 36 months
- 35% of DAB Coins will be offered in additional ICO's for extending product portolio

We prefer to have rather many DAB Coin holders, as opposed to small number of holders with large numbers of DAB Coins.

# 9.3 Regulations

Platform does not hold client assets neither is it lending to the borrowers – all transactions are direct P2P transactions between the borrowers and lenders based on decentrally hosted blockchain.

Both contract parties have the freedom of contract and their mutual agreements are based on contract law. Platform is not a subject to financial intermediaries law, which would be the case if client assets are held or lending would be executed.

Should further regulations emerge, then Decentral Autonomous Banks goal is to correspond fully to regulations.

# 10 Additional information

#### 10.1 Decentral Autoomous Bank

• Web Site: www.decentral-bank.com

• Web Site: <u>www.decentralbank.com</u> (registration pending)

• Founders Blog: <u>www.blockchain-business.com</u>

• Medium: medium.com/decentral-bank

• Steemit: <u>steemit.com/@decentral-bank</u>

• Slack: <u>decentral-bank.slack.com</u>

• Whitepaper: github.com/decentral-bank/whitepaper

#### 10.2 General

 The future will be decentralized, Charles Hoskinson: https://www.youtube.com/watch?v=g7ufCT6lQcY

- 2. P2P Foundation: http://p2pfoundation.net
- 3. IPFS
- 4. Bitshares
- 5. Uport.me
- 6. Global Peer to Peer Lending Market to Grow at a CAGR of 51.5% by 2022: http://www.businesswire.com/news/home/20170403005921/en/Global-Peer-Peer-Lending-Market-Grow-CAGR
- 7. Modern Portfolio Management Approaches for Cryptocurrencies: <a href="https://blockchain-business.com/modern-portfolio-management-approaches-for-cryptocurrencies-doaofdco9305">https://blockchain-business.com/modern-portfolio-management-approaches-for-cryptocurrencies-doaofdco9305</a>
- 8. How traditional banking business revenues will be impacted with crypto and smart contracts: <a href="https://blockchain-business.com/how-traditional-banking-business-revenues-will-be-impacted-with-crypto-and-smart-contracts-aob84c7c67df">https://blockchain-business.com/how-traditional-banking-business-revenues-will-be-impacted-with-crypto-and-smart-contracts-aob84c7c67df</a>
- 9. How private banking processes will be impacted by blockchain disintermediation: <a href="https://blockchain-business.com/how-private-banking-processes-will-be-impacted-by-blockchain-disintermediation-5822d70ea612">https://blockchain-business.com/how-private-banking-processes-will-be-impacted-by-blockchain-disintermediation-5822d70ea612</a>

# 10.3 Founders

- Martin's profile in LinkedIn: <a href="https://ch.linkedin.com/in/martinploom">https://ch.linkedin.com/in/martinploom</a>
  - Martin has worked for the last 10 years for Credit Suisse, UBS and Man Investments in Switzerland and has been leading strategic intitiatives for years. His last 2.5 years initiative at Credit Suisse was 10+ mCHF Business Initiative for improving Sales Effectivness of Private Banking Relationship Managers through improved banking processes. Before financial sector he lead development and launch of four highly successful commercial products (three of them being artificial intelligence based). He is an EMBA, Dipl. Inf., Ms. Ec. and finished CFA Level III in 2010.
- Tarmo's profile in LinkedIn: <a href="https://ch.linkedin.com/in/tarmo-ploom-3245422">https://ch.linkedin.com/in/tarmo-ploom-3245422</a>